



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,048	04/08/2004	Sadanand V. Deshpande	FIS920030397US1	3047
29154	7590	10/24/2006	EXAMINER	
FREDERICK W. GIBB, III GIBB INTELLECTUAL PROPERTY LAW FIRM, LLC 2568-A RIVA ROAD SUITE 304 ANNAPOLIS, MD 21401			INGHAM, JOHN C	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/709,048	Applicant(s) DESHPANDE ET AL.	
	Examiner John C. Ingham	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,12-14 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,12-14 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendments to the claims filed 23 August 2006 have been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1-2, 4-9, 12-14, and 26-29** are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (US 7,064,396).
4. Regarding claims **1-2, 4, 8-9, and 26**, Chen discloses in Figure 8 an integrated circuit structure comprising: a substrate (103); first-type transistors (113) on said substrate, wherein said first-type transistors comprise first gate conductors (117) and first spacers (213) adjacent said first gate conductors; second-type transistors (115) on said substrate, wherein said second-type transistors comprise second gate conductors (119), said first spacers (217) adjacent said second gate conductors, said first spacers adjacent said second gate conductors, an etch stop layer (Fig 3 item 319) on said first spacers, and second spacers (327) on said etch stop layer, wherein said etch stop layer is only on said first spacers that are adjacent said second gate conductors and said etch

Art Unit: 2814

stop layer is not on said first spacers that are adjacent said first gate conductors (etch stop 319 only on transistor 115); wherein said second spacers are only on said etch stop layer on said first spacers that are adjacent said second gate conductors, and said second spacers are not adjacent said first spacers that are adjacent said first gate conductors (spacers 327 only on transistor 115); first-type (N type) impurity implants (Fig 5 item 507, see col 4 ln 8-12) in areas of said substrate completely outside of and adjacent to said first spacers of said first gate conductors (117); second-type (P type) impurity implants (Fig 4 item 407) in areas of said substrate completely outside of and adjacent to said second spacers of said second gate conductors (119); first silicide regions (805) proximate said first spacers of first-type transistors; and second silicide regions (809) proximate said second spacers of said second-type transistors, wherein said second silicide regions are farther from said second gate conductors than said first silicide regions are from said first gate conductors (see Fig 8).

5. With regards to claims **5, 12 and 27**, Chen discloses in Figures 4 and 6 the structure of claims 4, 8 and 26, wherein said first type impurity (507, see col 4 ln 8-12) is spaced closer to said first gate conductors than said second type impurity (407) is spaced from said second gate conductors.

6. With regards to claims **6, 13 and 28**, Chen discloses in Fig 8 the structure of claims 1 and 8, wherein said first type impurity and said second type impurity comprises source/drain impurities (col 3 ln 61 and col 4 ln 3).

Art Unit: 2814

7. Regarding claims 7, 14 and 29, Chen discloses in Fig 8 the structure of claims 1 and 8, wherein said first type transistors (113) comprise NFETs and said second type transistors (115) comprise PFETs.

Response to Arguments

8. Applicant's arguments, see page 7, filed 23 August 2006, with respect to the rejection(s) of claim(s) 2-3 and 9-10 under 35 USC §103 have been fully considered and are persuasive. Pradeep and Kao do not teach the removal of an etch stop layer and spacer from only one transistor. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chen. Limitations of claims 3 and 10 are now incorporated into independent claims 1, 8, and 26.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C. Ingham whose telephone number is (571) 272-8793. The examiner can normally be reached on M-F, 8am-5pm.

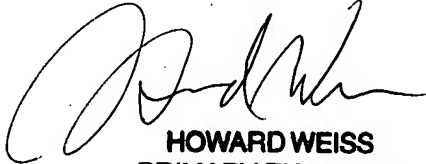
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2814

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John C Ingham
Examiner
Art Unit 2814

jci



HOWARD WEISS
PRIMARY EXAMINER